

**REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. With this amendment, claim 31 has been canceled. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Thus, claims 1-8, and 10-30 are pending in the application, with claims 17-30 withdrawn.

**Claim Rejections-35 U.S.C. § 112**

Claim 2 was rejected under 35 U.S.C. § 112, second paragraph for allegedly being indefinite. Specifically, the Examiner cited a lack of antecedent basis for the “template nucleic acid.” Applicants respectfully traverse this rejection.

Applicants note that claim 2 introduced the template nucleic acid with the transition phrase “further comprising.” As such, there is simply no need for antecedent basis in claim 1. Applicants respectfully request withdrawal of the rejection.

**Claim Rejections-35 U.S.C. § 102**

Claims 1, 4-5, 7-8, 10-14, 16 and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chan EY (US Patent No. 6,210,896). Claims 1, 4-5, 7-8, 10-14, 16 and 31 were rejected under 35 U.S.C. § 102(e) and 35 U.S.C. § 102(a) as being anticipated by Chan EY (US Patent No. 6,355,420). Applicants respectfully traverse these rejections.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegall Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Indeed, “[t]here must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.” *Scripps Clinic & Research Found. v.*

*Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). Independent claim 1 recites “obtaining a plurality of labeled proteins, polypeptides or peptides, and placing the plurality of labeled proteins, polypeptides or peptides in a plurality of chambers, *such that different chambers contain a different type of labeled amino acid.*” Neither Chan reference discloses this feature. In the response to Applicants arguments, the Examiner merely asserts “[the] Chan reference as a whole teaches the claimed invention of instant application.” (Office action, p.14, l.12-13). The Examiner states “[t]he reference teaches that the method is performed on a plurality of polymers, simultaneously” and “[t]he reference teaches that multiple polymers can be analyzed simultaneously by causing more than one polymer to move relative to respective signal station on respective molecular motors.” (Office action, p.15, l.5-8). The Examiner then concludes, “[t]herefore, [the] Chan reference as a whole anticipates the claimed invention of instant application.” (Office action, p.15, l.12-13).

However, Chan ‘896 teaches,

One aspect of linear analysis techniques involves the movement of the polymer past a station in such a manner as to cause a signal that provides information about the polymer to arise. One method by which this movement can be achieved involves the use of molecular motors. A molecular motor is a molecule that interacts with a polymer and moves the polymer, unit by unit, past a station so that the polymer may be analyzed. (Col.2, l.52-55).

Multiple polymers can be analyzed simultaneously by causing more than one polymer to move relative to respective signal stations on respective molecular motors. (Col.8, l.64-66).

Simply, Chan ‘896 merely teaches that more than one polymer can be analyzed at a time if multiple signal stations are provided. At best, Chan is silent as to the use of “a plurality of chambers, *such that different chambers contain a different type of labeled amino acid,*” as recited in independent claim 1. As taught by the present application, however, “[w]here twenty chambers 120 are used containing all twenty different labeled amino acid residues, the distance maps 140 may be compiled into a complete protein sequence 150.” (Paragraph [0038]). That is, the present inventors recognized there is an advantage to having “a plurality of chambers, *such that different chambers contain a different type of labeled amino acid,*” as recited in independent claim 1. Chan ‘896 does

not teach this feature and therefore does not anticipate independent claim 1 or any of the claims that depend from independent claim 1.

Chan ‘420 teaches,

By examining each unit individually the type of unit and the position of the unit on the backbone of the polymer can be identified. This can be accomplished by positioning a unit at a station and examining a change which occurs when that unit is proximate to the station. The change can arise as a result of an interaction that occurs between the unit and the station or a partner and is specific for the particular unit. For instance if the polymer is a nucleic acid molecule and a T is positioned in proximity to a station a change which is specific for a T occurs. If on the other hand, a G is positioned in proximity to a station then a change which is specific for a G will occur. (Col.6, 1.48-59).

That is, Chan ‘420 merely teaches the unremarkable fact that different detectors will detect different labels. Chan ‘420, however, does not teach a method using “a plurality of chambers, *such that different chambers contain a different type of labeled amino acid*,” as recited in independent claim 1. The Examiner’s conclusion, that “[the] Chan reference as a whole anticipates the claimed invention of instant application” (Office action, p.15, l.12-13) simply treats the recited features as a mere catalog of separate parts. This, however, is improper. *See Lindemann Maschinenfabrik GmbH v. Am. Hoist and Derrick Co.*, 730 F.2d 1452, 1459 (Fed. Cir. 1984)(reversing a finding of anticipation because “The district court’s analysis treated the claims as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning”). Independent claim 1 recites “a plurality of chambers, *such that different chambers contain a different type of labeled amino acid*,” a feature which is simply not taught by Chan ‘420. Therefore, Chan ‘420 does not anticipate independent claim 1 or any of the claims that depend on independent claim 1.

### **Claim Rejections-35 U.S.C. § 103**

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chan EY (US Patent No. 6,210,896) as applied to claims 1, 4-5, 7-8, 10-14, 16 and 31. Claims 2, 6, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan EY (US Patent No. 6,210,896) as

applied to claims 1, 4-5, 7-8, 10-14, 16 and 31 above in view of Thompson et al (US Patent No. 5,324,637).

As discussed above, neither Chan '896 nor Chan '420 teach or suggest "a plurality of chambers, *such that different chambers contain a different type of labeled amino acid,*" as recited in independent claim 1 or amended independent claim 2. Thompson merely teaches, "a simple method for producing protein from a template DNA in a standard in vitro translation reaction utilizing a eukaryotic cellular lysate." (Col. 4, l.14-15). Thompson does not teach or suggest "a plurality of chambers, *such that different chambers contain a different type of labeled amino acid,*" as recited in independent claim 1 or amended independent claim 2. Further, regarding the Examiner's conclusion that "[the] Chan reference as a whole anticipates the claimed invention of instant application" (Office action, p.15, l.12-13), even under the new KSR standard this conclusion does not support a finding of obviousness. "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness". *KSR Int'l Co. v. Teleflex Inc.*, No. 04-1350, slip op. at 11 (U.S. April 30, 2007)(citing *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006)). For at least these reasons, no combination of the Thompson and either Chan '896 or Chan '420 render independent claims 1 or 2 obvious or any of the claims that depend on independent claims 1 or 2.

### **Claim Objections**

Claim 31 was objected to as being a substantial duplicate of claim 1. Claim 31 has been canceled.

### **CONCLUSION**

It is respectfully submitted that each of the presently pending claims are in condition for allowance and notification to that effect is requested. Examiner is invited to contact the Applicants'

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representative at the below-listed telephone number if it is believed that the prosecution of this application may be assisted thereby.

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